

Heliophysics Subcommittee Meeting, July 1, 2015

10:00 MMS Update/GI Funding

B. Paterson, NASA HQ

Magnetospheric Multiscale (MMS) Mission Weekly Report – June 25, 2015

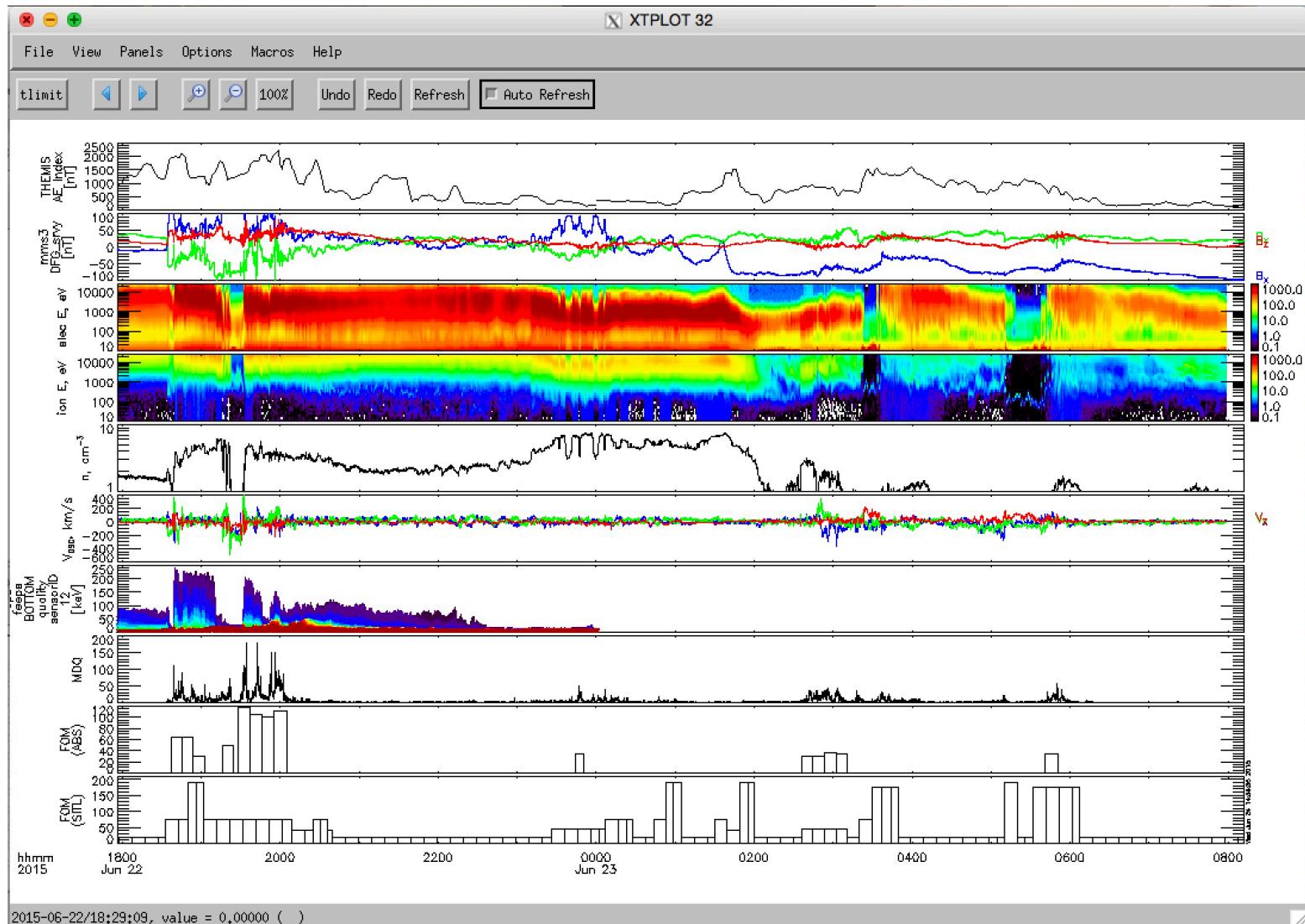
Mission Phase: Phase D-Commissioning

MMS has exited the long eclipse period at apogee which extended thru June 21. Spacecraft power and thermal performance is well within predictions with ***no surprises during the long shadows***. Instrument commissioning activities were largely stood-down as planned during the eclipse period.

MMS Instruments have been activated and commissioning activities are resuming.

MMS Science during recent major solar event: During both the ***Van Allen Probes (VAP)-MMS cross-calibration interval on June 12*** and the June 22-23 MMS commissioning activity with the Fast Plasma Investigation (FPI), all MMS electromagnetic fields and energetic particle detector instruments were collecting excellent data. We saw EMIC (electromagnetic ion cyclotron waves) at the same time that VAP was measuring particle fluxes on June 12 during a moderate solar sub-storm. ***On June 22-23 MMS happened to be taking full burst data with FPI during the most energetic solar sub-storm interval of this solar cycle.*** The science studies from just these two days seems very promising.

Use of SITL (Scientist In The Loop) to check or override Automated Burst Selection



2015 Heliophysics Guest Investigator Program (ROSES B.4)

Open Call (except no MMS)

202 Step-1 Proposals

4 Sub-Topic Areas

- Heliosphere
- Ionosphere-Thermosphere-Mesosphere
- Magnetosphere
- Solar

62 external reviewers, conflicts avoided

Results are going to PIs 6/30 – 7/2

Due date for Step-2 delayed from July 10 to July 31 to allow ~30 days between Step-1 notification and Step-2 submission

Delayed Step-2 due date has no impact on Step-2 decision timeline

GI ROSES language modified for 2015 – adopted from Astrophysics

From ROSES 2015 B.4

In support of any H-GI proposal, *investigations may employ theory, models, and data from other sources, as needed to interpret and analyze NASA's HSO data, but only as a secondary emphasis.* However, in any such instance, the *proposal must clearly demonstrate that the theory, models, and/or data in question are necessary for interpretation of the HSO data*, and are not themselves the primary object of the investigation. Development of new models and theories is not solicited.

Potential Scenario for MMS/Guest Investigator

ROSES 2016: Fully Open GI – Allow proposal pressure to determine relative funding for MMS related research

ROSES 2017: Special GI call for MMS (or MMS/HSO/Themis/GB coordination) *if* warranted, based on evaluation of response to ROSES 2016